Annual Wild Turkey Status Report
2020

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TWRA Wildlife Technical Report 21-1, March 2021

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TENNESSEE WILDLIFE RESOURCES AGENCY

Roger Shields, Wild Turkey Management Program Coordinator

TWRA Wildlife Technical Report 21-1

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Spring Turkey Season

Reported Harvest

Traditionally, turkey harvest has been monitored by the Tennessee Wildlife Resources Agency (TWRA) through mandatory hunter reporting, or checking, of harvested game. Starting in about 2010, physical check stations largely have been replaced by reporting options using the internet (GoOutdoorsTN.com) and smart-phone mobile applications (the "TWRA On the Go" app). Beginning this spring, big-game hunters in Tennessee are now required to tag their harvest before moving it ("Tag Before You Drag") and then report it as previously required (i.e., by the end of the calendar day of harvest and before transferring the animal to another person or leaving the state). Checking a bird in the field at the time of harvest using the mobile app meets both the tagging and reporting requirement and nothing more is required of the hunter.

The 2020 reported spring turkey harvest was 40,105 and is the record harvest for Tennessee, 28% higher than 2019, 27% above the 5-year average, and 8.1% above the previous record harvest, recorded in 2010 (Figure 1). Although we do not have data on hunter participation in previous years, based on increased license sales early in the season and mid-season harvest numbers, it appears a record number of hunters took to the fields this spring, likely on account of limited competing activities due to social distancing restrictions imposed in response to the SARS-CoV-2 (i.e., COVID-19) pandemic. Interestingly, 6,975 hunters reported harvesting a bird for the first time in at least 10 years, 68% greater than the 4,153 hunters who normally report harvesting a bird for the first time in as many years (based on the previous 5-year average). The top five counties in the state for reported harvest were Maury, Greene, Dickson, Sumner, and Giles counties (Table 1).

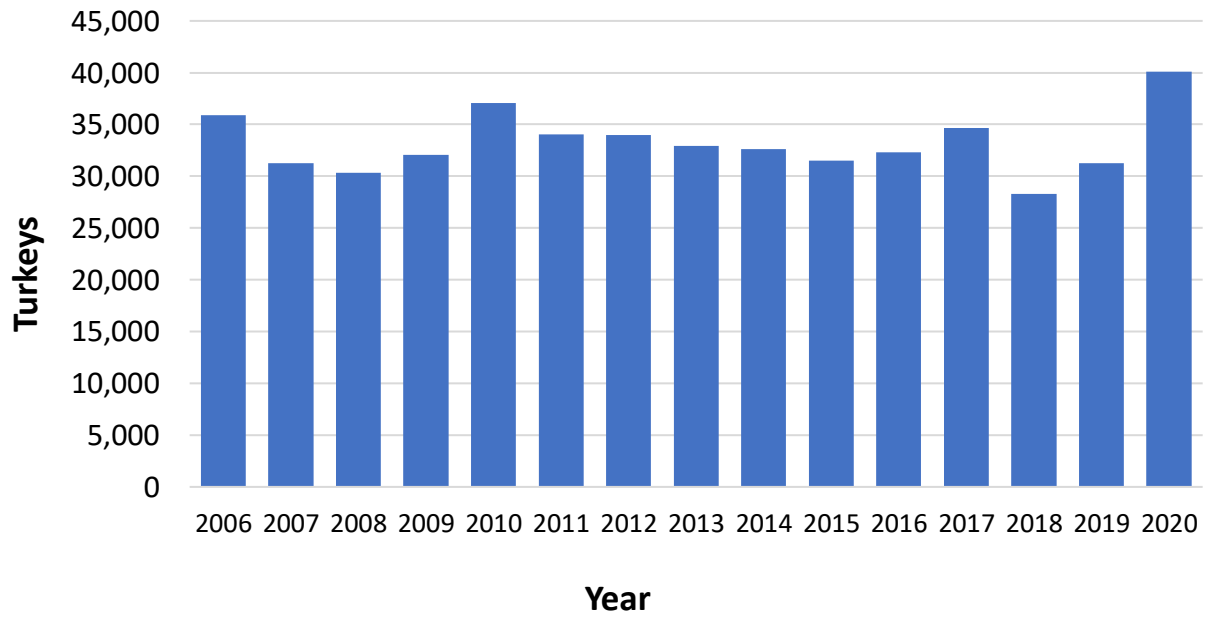


Figure 1. Total reported harvest during spring turkey season, 2006-2020.

Table 1. Total reported spring turkey harvest by county (inclusive of WMA harvests), 2020.

County	Region	Total Harvest
Anderson	4	214
Bedford	2	653
Benton	1	380
Bledsoe	3	295
Blount	4	412
Bradley	3	291
Campbell	4	381
Cannon	2	308
Carroll	1	569
Carter	4	269
Cheatham	2	523
Chester	1	175
Claiborne	4	469
Clay	3	306
Cocke	4	515
Coffee	2	379
Crockett	1	71
Cumberland	3	407
Davidson	2	326
Decatur	1	236
Dekalb	3	396
Dickson	2	941
Dyer	1	189
Fayette	1	426
Fentress	3	219
Franklin	2	370
Gibson	1	438
Giles	2	857
Grainger	4	444
Greene	4	1078
Grundy	3	301
Hamblen	4	184
Hamilton	3	375
Hancock	4	190
Hardeman	1	567
Hardin	1	556
Hawkins	4	616
Haywood	1	190
Henderson	1	393
Henry	1	539
Hickman	2	685
Houston	1	323
Humphreys	1	483
Jackson	3	387
Jefferson	4	492
Johnson	4	265
Knox	4	497
Lake	1	59

County	Region	Total Harvest
Lauderdale	1	189
Lawrence	2	331
Lewis	2	276
Lincoln	2	678
Loudon	4	294
Macon	2	450
Madison	1	366
Marion	3	467
Marshall	2	693
Maury	2	1499
McMinn	3	430
McNairy	1	404
Meigs	3	294
Monroe	3	420
Montgomery	2	837
Moore	2	168
Morgan	3	225
Obion	1	292
Overton	3	479
Perry	1	220
Pickett	3	188
Polk	3	141
Putnam	3	368
Rhea	3	334
Roane	3	431
Robertson	2	772
Rutherford	2	842
Scott	4	272
Sequatchie	3	245
Sevier	4	317
Shelby	1	143
Smith	2	448
Stewart	1	379
Sullivan	4	556
Sumner	2	880
Tipton	1	142
Trousdale	2	208
Unicoi	4	97
Union	4	339
Van Buren	3	298
Warren	3	415
Washington	4	470
Wayne	2	474
Weakley	1	559
White	3	470
Williamson	2	826
Wilson	2	840
Grand total		**40,105**

Regionally, despite substantially increased harvest in the other regions, harvest numbers in west Tennessee, which comprises TWRA Region 1, were up only slightly (comparatively speaking) from 2019 and the 5-year average (6.1% and 6.3%, respectively). The other three regions all saw large increases in reported harvest (33.3% - 38.2%) over 2019 (Figure 2), and total reported harvest was up substantially over their respective 5-year averages, ranging from 29.3% to 37.9% higher.

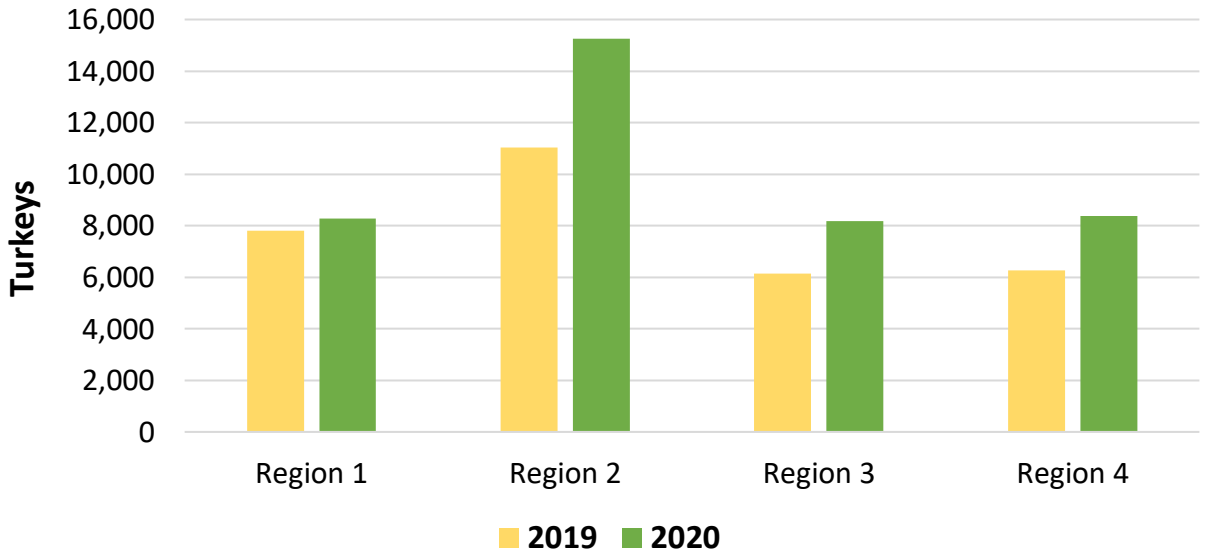


Figure 2. Total reported spring turkey harvest by TWRA administrative region, 2019 and 2020.

Hunter Harvest Survey

Following the 2020 spring turkey season, TWRA contracted with the University of Tennessee to conduct a new annual harvest survey of wild turkey hunters. The primary objective of this turkey hunter survey is to estimate hunter numbers, hunting effort, and harvest success at the statewide level as well as by TWRA administrative region. Another objective is to understand hunter satisfaction and their opinions regarding various topics related to wild turkeys. One of the strengths of this survey is it uses standardized survey protocols and a statistically valid sample representative of the hunter population that allows results to be estimated with confidence intervals. So, even though estimates generated from the survey may differ markedly from reported harvest numbers, one can assess the level of confidence associated with these estimates. Further, the survey guarantees respondent anonymity, which bolsters honest reporting. This additional, statistically valid information on hunting effort and success provides for better monitoring of the turkey population and harvest trends over time than simply harvest numbers alone.

The sampling frame used for this survey consisted of individuals ≥18 years of age who had a valid license to hunt turkeys in Tennessee during the 2020 spring turkey season. We also included individuals who reported harvesting a turkey during the season to account for landowners who hunted their own property and were therefore exempt from license requirements. We used a stratified random sampling approach to ensure all license types were represented and we assigned participants to one of six strata (Annual, Disability, Lifetime, Non-resident, Permanent Senior, and Reported Harvest) based on expected

differences in response rate and a general similarity in license types. To collect data on turkeys harvested by youth during the turkey season, we asked the adult survey participants a series of questions regarding turkey harvest by youth they guided or mentored.

We used a mixed-mode approach to survey resident and non-resident spring turkey hunters in Tennessee. Individuals who had an email address on file were first invited to complete an online version of the survey. Three reminder emails were sent over a 2-week period. We then sent a hard copy of the survey with a business reply envelope to those who did not respond to the email invitation and those who did not have an email address on file. After a week, a final survey packet was mailed to participants. For additional details on survey methodology and analysis, as well as complete survey results, please refer to the full survey technical report available online at: https://www.tn.gov/content/tn/twra/hunting/big-game/turkey.html.

Results

During the spring 2020 turkey season, an estimated 90,015 ± 5,659 hunters (65,429 ± 2,950 adults and 24,586 ± 2,709 youth) statewide participated in turkey hunting and spent 728,558 ± 47,737 days afield. Adult and youth hunters combined harvested an estimated 57,633 turkeys (49,083 ± 4,725 adult gobblers, 7,946 ± 1,596 jakes, and 604 ± 400 bearded hens). The statewide harvest rate (the number of birds harvested per day of hunting) averaged 0.12 ± 0.01 for adult hunters and 0.18 ± 0.03 birds per day for youth hunters. Overall, 65% of adult hunters and 48% of youth hunters harvested at least one turkey during the 2020 spring turkey season. An additional estimated 7,499 ± 1,519 turkeys were shot but not killed or recovered by hunters during the 2020 spring turkey hunting season.

Most Tennessee hunters pursued turkeys to some degree on private land. From survey responses regarding where people hunt, an estimated 46,172 adults hunted only private land with another estimated 10,736 hunting both private and public land, whereas only 5,301 adult hunters exclusively hunted public land. Adult hunters who hunted both public and private land spent 15.6 ± 1.41 days afield on average, significantly greater than the 9.36 ± 0.64 and 7.28 ± 0.86 days spent by hunters on exclusively private and public lands, respectively. Harvest rate also differed significantly by land type. The harvest rate for private land-only hunters was 0.14 ± 0.02, whereas harvest rate was 0.09 ± 0.01 and 0.07 ± 0.02 for those who hunted on both public and private land and on only public land, respectively.

Regional differences occurred in harvest results. More adults hunted in Region 2 than any other region, and significantly more birds were harvested by adult hunters in Region 2 than in any other region (Table 2). Likewise, the estimated harvest rate was greatest in Region 2 (0.15 ± 0.02 birds/day) and differed significantly from that of Region 4, which had the lowest rate (0.10 ± 0.02; Table 2). Interestingly, the percentage of the gobbler harvest comprised of juvenile birds increased from west to east (Table 2).

Table 2. Estimated numbers of adult spring turkey hunters, harvest by adult hunters, and harvest metrics by TWRA administrative region, 2020.

	Adult Hunters	95% CL	Total Harvest	95% CL	Harvest Rate	95% CL	% Jakes
Region 1	14,036	1,593	9,517	1,211	0.11	0.02	8.61
Region 2	23,245	1,935	19,310	1,703	0.15	0.02	10.89
Region 3	13,979	1,617	8,460	1,158	0.11	0.02	13.53
Region 4	15,181	1,709	9,631	1,737	0.10	0.02	17.84

Most Tennessee hunters reported being satisfied with their hunting experience in 2020. Overall, 58% of the statewide respondents were somewhat or very satisfied with their spring turkey hunting experience. Another 14% of respondents indicated being neither dissatisfied nor satisfied and just over a quarter (27%) of respondents reported being dissatisfied or very dissatisfied with their turkey hunting experience this year (Figure 3). Satisfaction levels differed very little by administrative region, but a greater proportion of hunters in regions 2 and 3 reported being very satisfied compared to hunters in regions 1 and 4 (Figure 3).

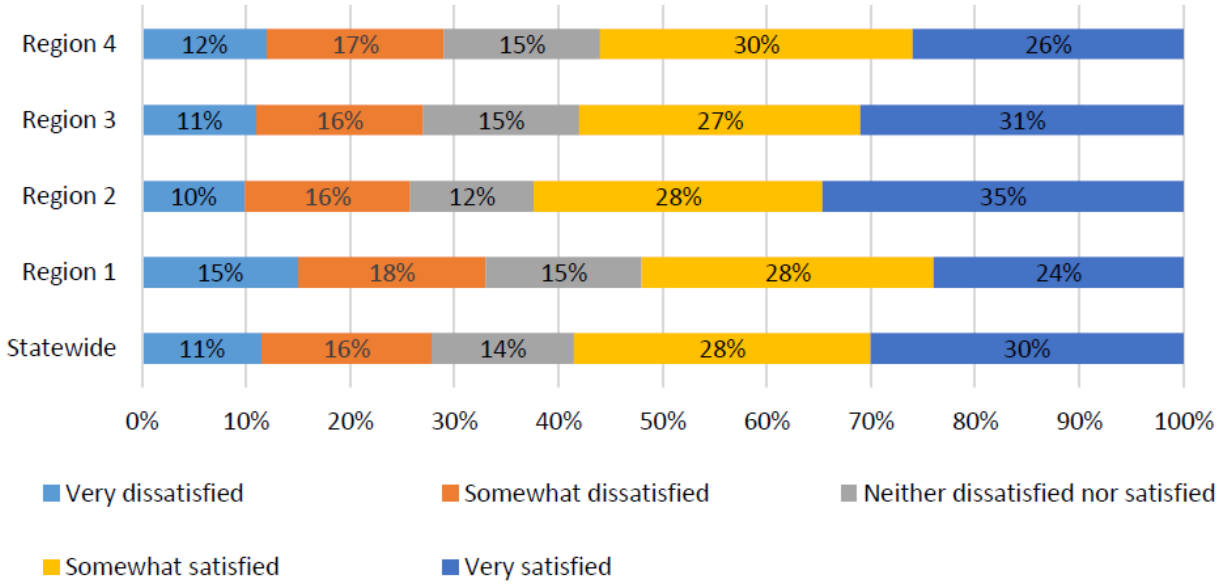


Figure 3. Reported satisfaction of spring turkey hunters with their spring 2020 hunting experience.

From the 2020 survey, we obtained information on hunter opinions about turkey populations in the areas they hunt. About half (51%) of the respondents perceived the turkey population in areas they hunt to have decreased over the years, whereas 21% feel populations have increased (Figure 4). A relatively greater proportion of hunters in Regions 1 and 2 reported declines in turkey populations compared to hunters in Regions 3 and 4 (Figure 4). When asked, hunters who reported observing declining populations in the areas they hunt predominantly believed predation (of both adults and young and of nests) to be the primary reason for observed declines. Fewer than a third of hunters believed other potential causes (e.g., loss of habitat, bad weather during nesting season, hunting pressure) were related to declining populations.

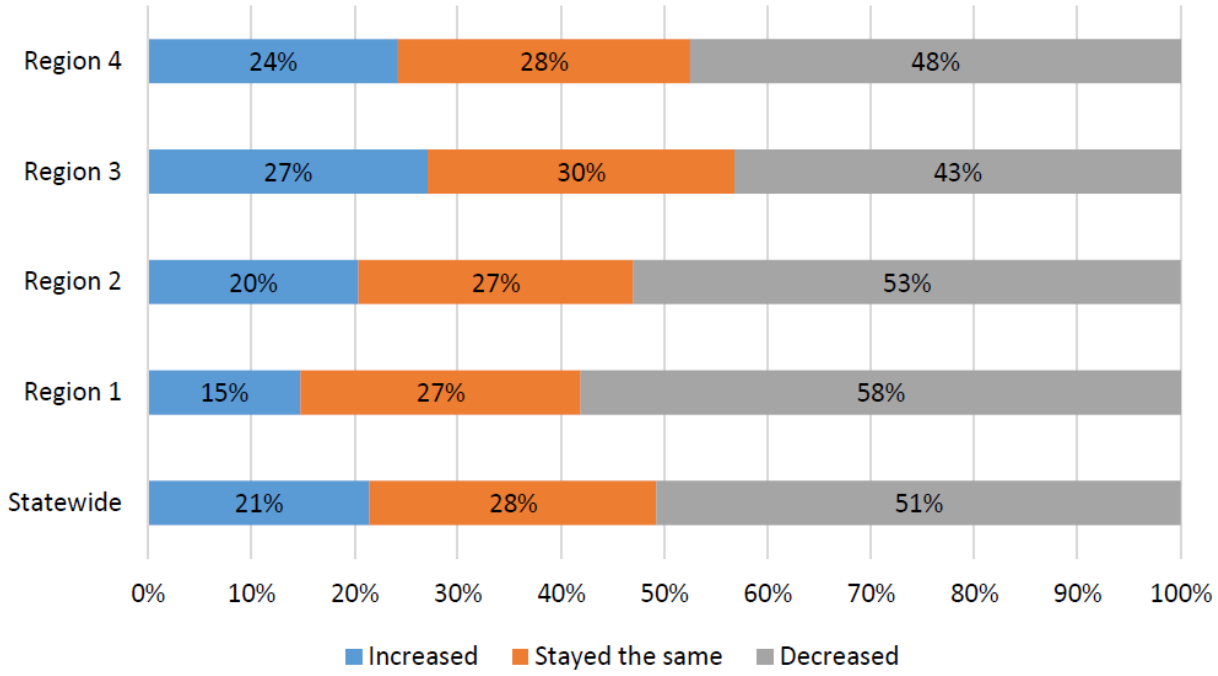


Figure 4. Perceptions of Tennessee turkey hunters regarding how turkey populations in the areas they hunt have changed over time.

Fall Turkey Season

In 2018, the Tennessee Fish and Wildlife Commission eliminated either-sex fall hunting in favor of bearded turkeys only during the fall beginning with the 2018 season. Consequently, subsequent fall harvest numbers are not readily comparable to earlier harvests. The total reported 2020 fall season harvest was 356 birds, virtually unchanged from the 2019 fall season harvest of 360 birds. Sullivan, Cocke, Greene, Claiborne, and Hawkins counties were the top five counties in the state for fall 2020 (Table 3). Harvest in the fall on WMAs was minimal (Table 4).

Juvenile males (i.e., "jakes") accounted for 11% of the statewide fall gobbler harvest in 2020. Jakes comprised the highest proportion of the harvest in Region 3, representing 17% of the gobbler harvest (Figure 5). Bearded females represented about 6% (21 birds) of the fall harvest in 2020. Clearly, regulatory efforts to protect the female segment of the turkey population from harvest are succeeding. Even though the bag limit during the fall is one bearded turkey per county, only five hunters reported harvesting more than a single bird during the fall season.

Table 3. Reported fall turkey harvest by county (inclusive of WMA harvests), 2020.

County	Region	Total Harvest
Anderson	4	1
Bedford	2	6
Benton	1	2
Bledsoe	3	1
Blount	4	5
Bradley	3	0
Campbell	4	0
Cannon	2	3
Carroll	1	5
Carter	4	7
Cheatham	2	6
Chester	1	3
Claiborne	4	13
Clay	3	2
Cocke	4	15
Coffee	2	0
Crockett	1	0
Cumberland	3	0
Davidson	2	3
Decatur	1	2
Dekalb	3	2
Dickson	2	7
Dyer	1	0
Fayette	1	3
Fentress	3	0
Franklin	2	1
Gibson	1	1
Giles	2	0
Grainger	4	3
Greene	4	14
Grundy	3	2
Hamblen	4	1
Hamilton	3	1
Hancock	4	6
Hardeman	1	3
Hardin	1	8
Hawkins	4	13
Haywood	1	0
Henderson	1	3
Henry	1	3
Hickman	2	5
Houston	1	4
Humphreys	1	4
Jackson	3	3
Jefferson	4	10
Johnson	4	6
Knox	4	3
Lake	1	0

County	Region	Total Harvest
Lauderdale	1	0
Lawrence	2	0
Lewis	2	1
Lincoln	2	0
Loudon	4	0
Macon	2	0
Madison	1	5
Marion	3	4
Marshall	2	6
Maury	2	8
McMinn	3	0
McNairy	1	4
Meigs	3	1
Monroe	3	0
Montgomery	2	5
Moore	2	2
Morgan	3	1
Obion	1	2
Overton	3	6
Perry	1	1
Pickett	3	2
Polk	3	0
Putnam	3	5
Rhea	3	4
Roane	3	3
Robertson	2	8
Rutherford	2	6
Scott	4	4
Sequatchie	3	6
Sevier	4	6
Shelby	1	0
Smith	2	3
Stewart	1	7
Sullivan	4	20
Sumner	2	9
Tipton	1	0
Trousdale	2	4
Unicoi	4	0
Union	4	6
Van Buren	3	1
Warren	3	1
Washington	4	11
Wayne	2	0
Weakley	1	6
White	3	9
Williamson	2	5
Wilson	2	4
Grand total		**356**

Table 4. Fall turkey harvest by WMA, 2020.

WMA	Region	2020 Harvest
Big South Fork	3	1
North Cherokee NF & WMA	4	2
North Cumberland WMA	4	4
Percy Priest WMA	2	1
White Oak WMA	1	1
Yanahli WMA	2	1
Grand total		**10**

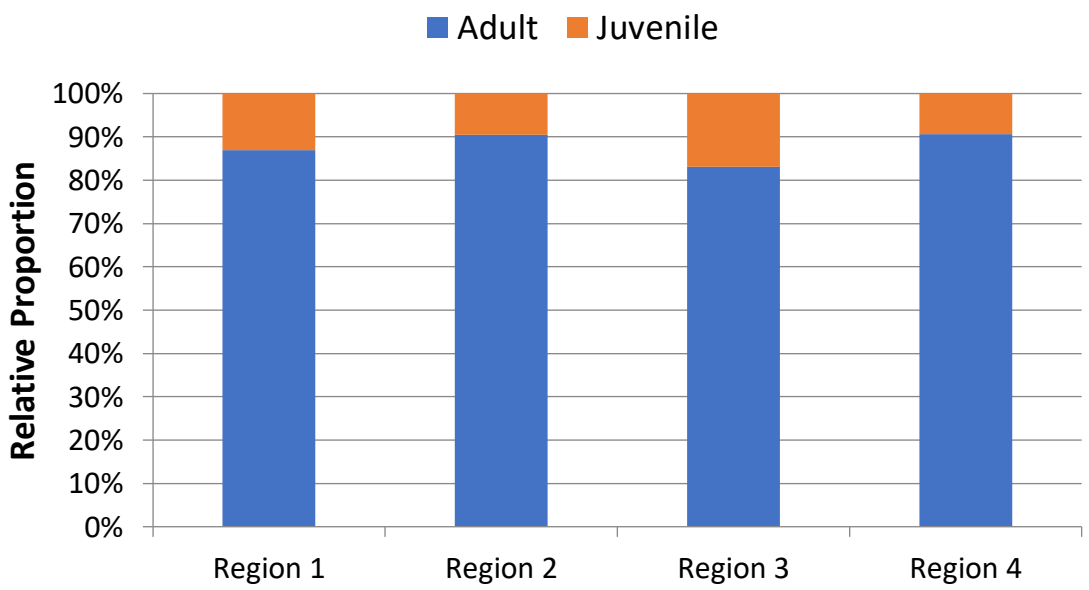


Figure 5. Proportion of juvenile males in the fall gobbler harvest by TWRA Administrative Region, 2020.

Statewide Summer Wild Turkey Survey

Each year TWRA maintains records of sightings of wild turkeys to provide supplemental data on population trends. These sightings provide us estimates for monitoring trends in nesting success, trends in brood survival, trends in annual productivity, peak hatching dates on turkey brood range, and carry-over of males from the spring hunting season.

During the summer survey, agency staff and other natural resource professionals record observations of wild turkeys made incidental to regular field activities from June through the end of August. Observations are recorded on the "Wild Turkey Survey Report" form (Appendix A) or with a mobile device using a Survey123 electronic survey form. The observer records the date and county of the observation, the number of adult individuals by sex, the number and age class of poults, and whether the observation was made on private or public lands as indicated on the "Wild Turkey Survey Report" form. Accurate counts are important; if more than one hen is present with a group of poults, the observer ascertains if there is more than one age group present. The observer also notes if vegetation inhibited an accurate poult count and whether they had likely seen this group of turkeys before.

The main purpose of the summer survey is to obtain wild turkey production and population data which can be compared with previous year's data in evaluation of population trends. Data is collected from June to August, but historically only August data has been used to obtain most of the estimates, including an overall poult to hen ratio estimate. The reasoning behind this is based on the fact that if a poult makes it into the month of August, survival odds are much greater.

Metrics estimated from data collected during the survey provide indices of productivity and population status. The percentage of hens observed with poults is an estimate of annual nesting success. The number of poults accompanying hens observed with poults (or poults per brood) is an indication of poult survival, as is brood attrition by age-class. The poults per hen ratio is a measure of overall productivity. Back-dating based on age class of poults observed generates an estimated nest chronology and an indication of when peak nesting for the year occurred. Lastly, the ratio of gobblers to hens provides an estimate of gobbler carry-over from the spring hunting season. Large harvests in the spring will typically lead to lower numbers of gobblers observed in the summer relative to hens. In broad terms, estimates <0.50 gobblers per hen indicate that excessive gobbler harvests may be occurring if quality spring harvest (i.e., abundant older-aged gobblers) is a management goal, while estimates approaching 1.0 gobbler per hen indicate there may be an additional harvestable surplus of gobblers.

Results

Observations were recorded during the 2020 summer survey by 72 different observers; observer numbers were down substantially from previous years ($n \approx 100$). The ongoing COVID-19 pandemic and adjusted work situations likely negatively impacted observer numbers this year. Likewise, participants recorded fewer total observations ($n = 669$) than during past surveys ($n \geq 749$). Not all counties were represented in the surveys and not all counties were represented equally (Table 5, Figure 6). To improve reliability of the estimates generated by these surveys, it would be preferable to obtain more total observations and greater coverage of the state (i.e., more counties with more observations).

Table 5. Number of Summer Wild Turkey Survey observations by county, 2020.

Region	County	2020 Count		Region	County	2020 Count
1	Benton	9		3	Bledsoe	2
1	Carroll			3	Bradley	
1	Chester	2		3	Clay	16
1	Crockett			3	Cumberland	37
1	Decatur	9		3	Dekalb	1
1	Dyer			3	Fentress	3
1	Fayette	10		3	Grundy	1
1	Gibson			3	Hamilton	
1	Hardeman			3	Jackson	15
1	Hardin	40		3	Marion	20
1	Haywood	1		3	McMinn	
1	Henderson	10		3	Meigs	
1	Henry	2		3	Monroe	19
1	Houston			3	Morgan	2
1	Humphreys	3		3	Overton	10
1	Lake			3	Pickett	1
1	Lauderdale	18		3	Polk	5
1	Madison	3		3	Putnam	22
1	McNairy	2		3	Rhea	
1	Obion			3	Roane	6
1	Perry	1		3	Seqatchie	
1	Shelby	4		3	VanBuren	6
1	Stewart	3		3	Warren	1
1	Tipton	1		3	White	14
1	Weakley			4	Anderson	2
2	Bedford	40		4	Blount	
2	Cannon			4	Campbell	9
2	Cheatham	1		4	Carter	1
2	Coffee	1		4	Claiborne	1
2	Davidson	6		4	Cocke	1
2	Dickson	16		4	Grainger	1
2	Franklin	2		4	Greene	3
2	Giles	48		4	Hamblen	13
2	Hickman	24		4	Hancock	1
2	Lawrence	37		4	Hawkins	
2	Lewis	3		4	Jefferson	13
2	Lincoln	1		4	Johnson	1
2	Macon			4	Knox	4
2	Marshall	3		4	Loudon	
2	Maury	60		4	Scott	
2	Montgomery	1		4	Sevier	1
2	Moore			4	Sullivan	
2	Robertson			4	Unicoi	10
2	Rutherford	6		4	Union	19
2	Smith			4	Washington	1
2	Sumner	1			**Grand Total**	**669**
2	Trousdale					
2	Wayne	30				
2	Williamson	8				
2	Wilson	1				

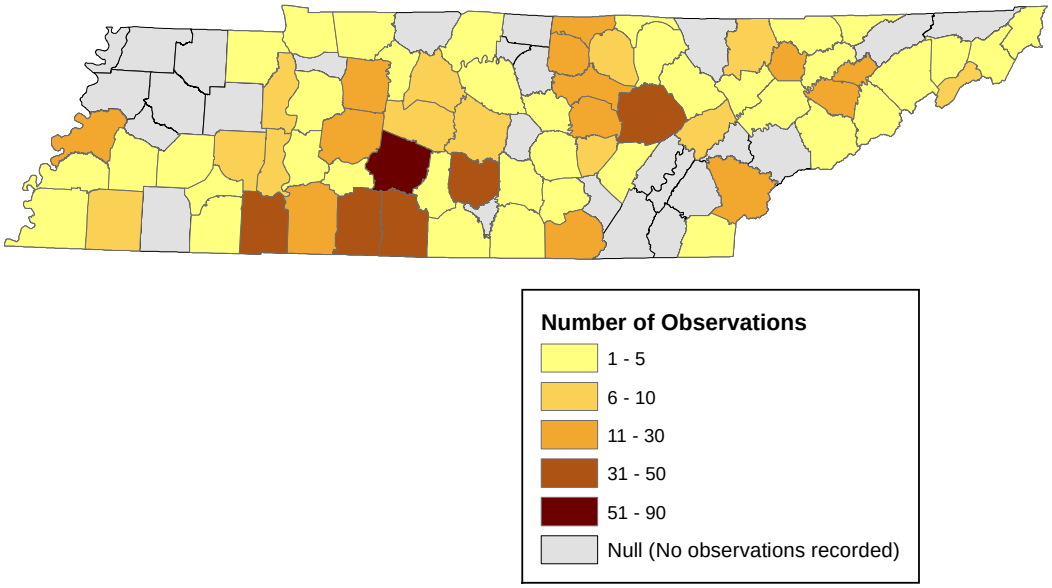


Figure 6. Observations of wild turkeys by county during the Summer Wild Turkey Survey, 2020.

Regionally, TWRA Region 3 had greater reproductive output in 2020, both in terms of poults per hen and brood size, than the other regions (Table 6, Figure 7), although no region reported especially good reproduction. Productivity as estimated from the survey was especially low in Region 1, where only 29% of hens were observed with poults resulting in a PPH index of only 0.80. However, as noted already, observer sightings in general were down during this year's survey and regional estimates were obtained from very few observations (*n* = 24-55).

Long-term August poult to hen ratios show a fairly steady decline (Table 7, Figure 8). Although the previous 6 years had been fairly stable at just under 2.0 poults per hen, results for 2020 (1.4 poults per hen) were the lowest on record and well below the previous 5-year average (1.9). The proportion of hens observed with poults (43%) was also the lowest on record, but the 3.3 poults per brood estimate was similar to the past several years suggesting that nest attempts or nest survival (or a combination of both) were very low this year, but poults from nests that successfully hatched faired about as well as normal (Table 8). (Note, although estimates of brood size are substantially lower than results reported prior to 2015, methodology used to calculate the estimate was different prior to 2015.) To what extent the presumed higher than normal hunting pressure during the spring hunting season had on nesting and reproductive success is unknown, but the poor reproductive output observed this year does hint that there may be a connection.

Table 6. Summary of reproductive data from the Summer Wild Turkey Survey [a], 2020.

	Total Turkeys Reported	Total Hens Reported	% of Hens w/ Poults	Poults per Hen Ratio	Poults per Brood	Total Poults Reported	Gobbler to Hen Ratio
Region 1	226	111	28.8%	0.80	2.78	89	0.40
Region 2	591	192	47.9%	1.57	3.27	301	0.50
Region 3	346	109	46.8%	1.75	3.75	191	0.29
Region 4	177	58	46.6%	1.43	3.07	83	0.42
Statewide	1340	470	43.0%	1.41	3.29	664	0.42

[a] All estimates are from August observations only, except the Gobbler to Hen ratio, which is calculated from all observations during the June - August survey period.

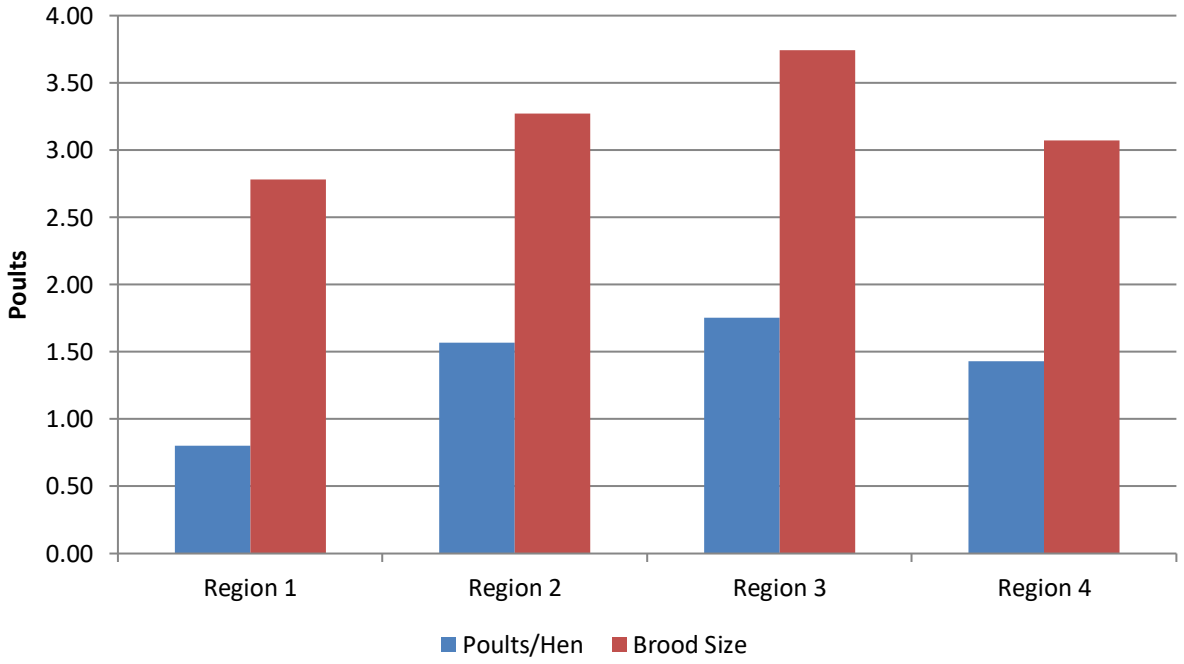


Figure 7. Overall productivity and brood size by region estimated from the Summer Wild Turkey Survey, 2020.

Table 7. Historical statewide Summer Wild Turkey Survey data, 1983-2020.

Year	Total Turkeys Reported	Total Hens Reported	% of Hens With Poults	Poults per Hen Ratio	Poults per Brood [a]	Total # of Poults
1983	471	68	61.8	5.3	6.8	360
1984	837	131	72.5	4.8	6.9	629
1985	1,216	138	76.8	7.0	7.2	966
1986	1,505	198	72.9	5.9	6.4	1,168
1987	1,528	235	81.3	4.9	7.0	1,152
1988	1,838	298	81.3	4.6	4.7	1,371
1989	1,976	232	88.4	6.4	7.4	1,485
1990	1,893	273	89.0	4.4	6.2	1,206
1991	2,739	421	85.5	4.9	7.4	2,028
1992	1,816	424	63.2	2.9	5.9	1,233
1993	3,037	491	84.5	4.6	6.7	2,258
1994	5,310	870	78.9	4.5	6.5	3,895
1995	3,173	518	72.6	4.5	6.7	2,350
1996	4,179	760	78.6	4.2	6.4	3,164
1997	2,856	663	60.5	2.8	5.7	1,831
1998	5,124	893	78.4	4.3	6.2	3,853
1999	3,100	592	74.5	3.8	6.4	2,229
2000	4,726	837	77.3	3.8	5.8	3,192
2001	3,573	606	76.9	4.0	6.1	2,415
2002	5,796	1,063	73.6	3.8	5.8	4,054
2003	2,126	574	60.6	2.4	6.0	1,365
2004	2,640	611	65.3	3.0	6.5	1,828
2005	1,540	369	50.1	2.6	5.0	964
2006	2,768	707	55.7	2.6	6.0	1,819
2007	2,100	593	53.8	2.2	4.2	1,277
2008	2,409	598	54.5	2.4	4.8	1,418
2009	1,478	377	57.8	2.5	6.2	957
2010	1,964	568	53.9	2.2	6.0	1,241
2011	4,278	1,110	56.7	2.3	6.1	2,587
2012	2,066	654	57.4	2.2	5.3	1,412
2013	2,487	806	51.9	2.1	5.6	1,683
2014	2,533	820	53.2	1.8	5.5	1,483
2015	2,760	746	59.8	2.3	3.8	1,689
2016	3,328	1,097	53.3	1.6	3.0	1,737
2017	2,661	836	56.8	1.7	3.0	1,444
2018	2,166	607	58.8	2.1	3.5	1,257
2019	2,128	642	54.7	1.8	3.3	1,166
2020	1,340	470	43.0	1.4	3.3	664
Average	2,652	579	67.1	3.5	5.7	1,788

[a] Prior to 2015, surveys recorded number of broods for each observation and the poults per brood (PPB) estimates were calculated based on that number; beginning 2015, PPB was calculated as PPB = #poults/#hens with poults

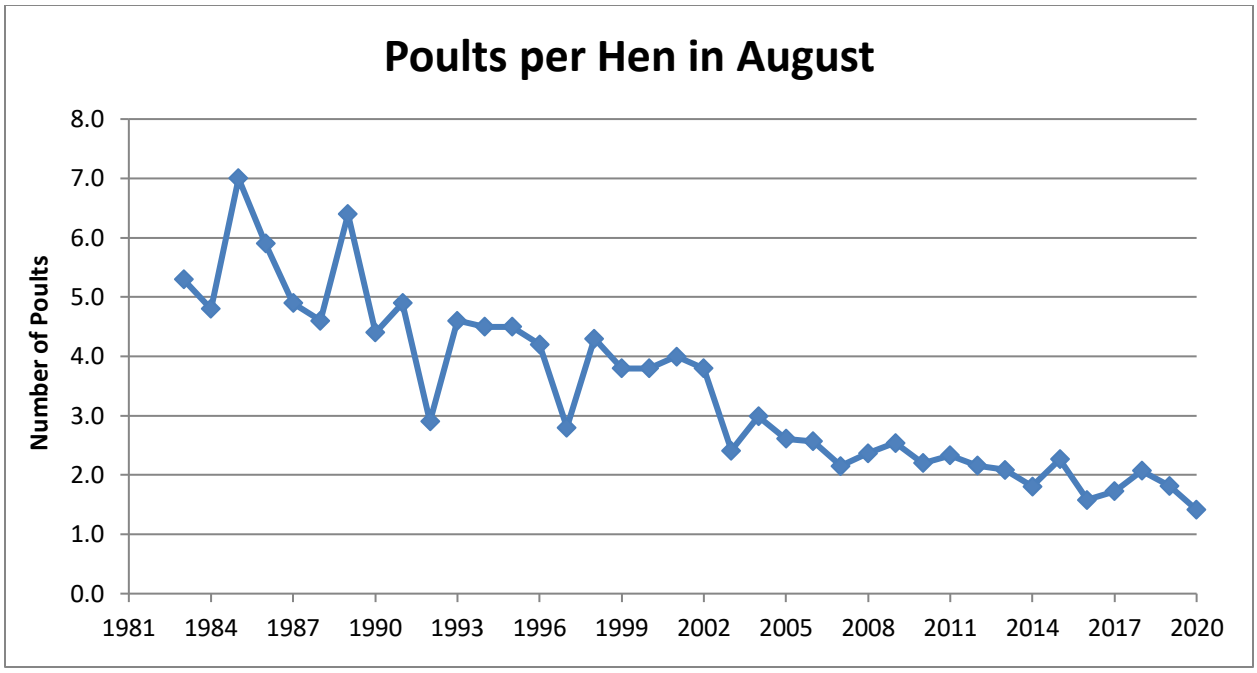


Figure 8. Statewide productivity estimates (poults per hen ratios) obtained from Summer Wild Turkey Survey data during the month of August, 1983-2020.

Table 8. Statewide average brood size by age class, 2003-2020.

	Poult Age Class [a]		
Year	1	2	3
2003	6.6	4.2	5.2
2004	7.4	6.4	5.4
2005	4.8	5.6	5.1
2006	6.4	5.0	4.6
2007	7.3	5.3	4.5
2008	6.3	6.0	4.7
2009	6.8	5.6	5.0
2010	6.6	4.8	5.0
2011	5.3	6.1	5.5
2012	5.1	6.3	5.9
2013	5.8	4.6	4.2
2014	3.7	3.5	4.4
2015	5.1	4.5	4.2
2016	4.1	4.1	3.3
2017	5.0	3.4	3.2
2018	4.7	3.8	3.5
2019	4.2	4.0	3.6
2020	3.4	3.3	3.5
Average	5.5	4.8	4.5

[a] Age classes: 1 = 1 week; 2 = 2-5 weeks; 3 = 6-8 weeks and older

Based on estimated age-classes of poults observed during the Summer Wild Turkey Survey (Table 8) and standard back-dating, earliest onset of egg-laying began the week of March 15 in 2020, but most nests (including initial attempts and renesting attempts) were initiated between the weeks beginning April 19 and May 31 (Figure 9). Median initiation date for all nesting attempts was during the week of May 10.

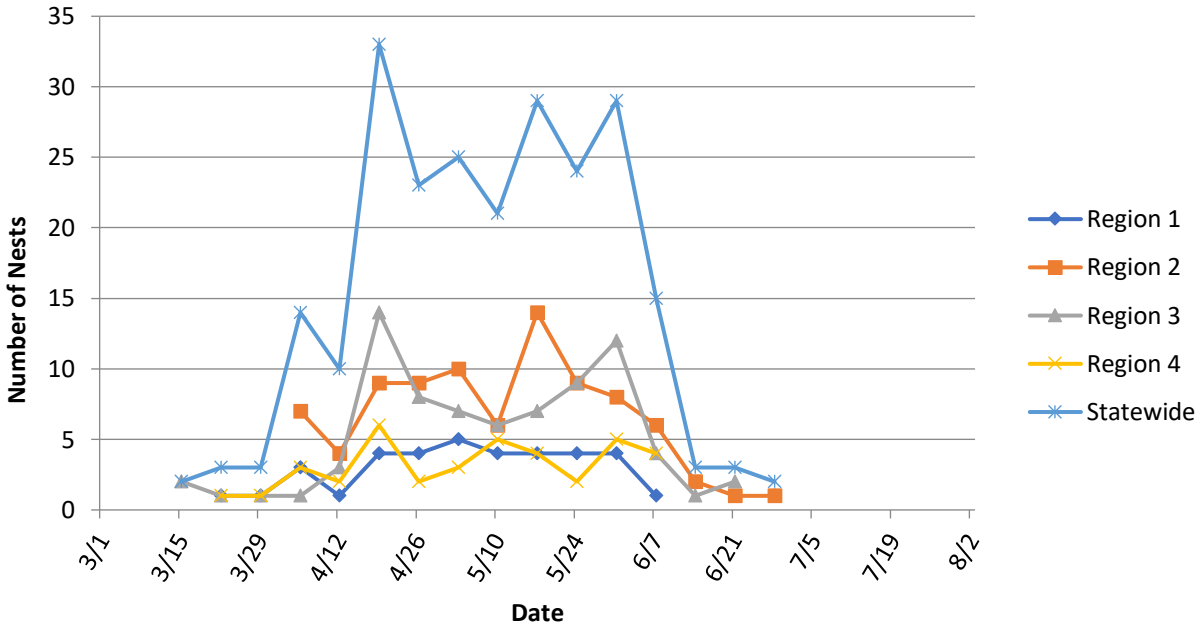


Figure 9. Statewide wild turkey nests initiated per week, 2020.

Appendix A.

2020 WILD TURKEY SUMMER SURVEY

Name: _____

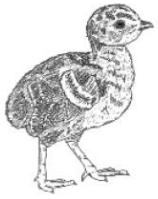
Phone Number: _____

RETURN TO:

- Supervisor by September 1
- Regional Biologist by September 5
- Nashville Office by September 10

WILD TURKEY POULT AGE CLASSES

Please classify poults observed as one of these three age classes and record in the "poult age" column.

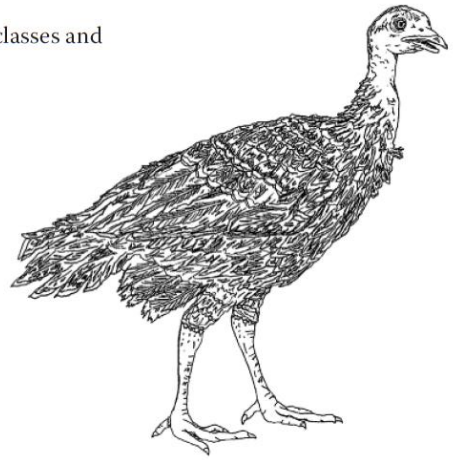


CLASS 1

cardinal size (Week 1)
up to 6 inches tall
full down
2 wing bars

CLASS 2

quail - wood duck size (Weeks 2–5)
7 - 10 inches tall
downy body, feathered wings
3 - 4 wing bars



CLASS 3

≥ chicken size (Weeks 6–8)
14 - 15 inches tall
body with contour feathers, some down at neck
black and white primaries emerging

Tennessee Wildlife Resources Agency

2020 WILD TURKEY SUMMER SURVEY

Name: ____________________ Affiliation ____________________ E-mail: __________________ Phone #: __________________

Date	County	# of hens without poults	# of hens with poults	# of poults	Poult age class	Complete observation?	# of males	# of ***adults*** unknown gender	Likely seen before?	Private or public land
					1 2 3	yes no			yes no	Priv. Pub.
					1 2 3	yes no			yes no	Priv. Pub.
					1 2 3	yes no			yes no	Priv. Pub.
					1 2 3	yes no			yes no	Priv. Pub.
					1 2 3	yes no			yes no	Priv. Pub.
					1 2 3	yes no			yes no	Priv. Pub.
					1 2 3	yes no			yes no	Priv. Pub.
					1 2 3	yes no			yes no	Priv. Pub.
					1 2 3	yes no			yes no	Priv. Pub.
					1 2 3	yes no			yes no	Priv. Pub.
					1 2 3	yes no			yes no	Priv. Pub.
					1 2 3	yes no			yes no	Priv. Pub.
					1 2 3	yes no			yes no	Priv. Pub.
					1 2 3	yes no			yes no	Priv. Pub.
					1 2 3	yes no			yes no	Priv. Pub.

- Please record all observations of gobblers, hens, and poults on this form.
- Record each observation on a single row. However, if poults of different age classes are present, record the number of poults in each age class on separate lines, with the accompanying hen group (brood).
- Accurate counts are important. When observing from a vehicle, pull over (if possible) to get a good look, preferably using binoculars.
- **Complete Observation**: If you are unable to get an accurate poult count due to vegetation cover, rapid movement, etc., circle "no." Incomplete counts are still used in data analysis.
- **Likely Seen Before**: If you suspect observations of the same turkey(s) are being made, record once per month and circle "yes" for subsequent observations.

Survey period begins June 1 and continues through August 31. Use multiple forms if needed.
Direct question/comments to: Roger Shields, TWRA Wild Turkey Program Coordinator, roger.shields@ tn.gov, (615) 781-6619.

WR-1032 (Rev. 4/20) • Wildlife & Forestry Division

Thank you for participating!